HD1900 19-inch Widescreen LCD Monitor

USERGUIDE



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Using Your Gateway Flat-Panel Monitor

- · Connecting your monitor
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- Adjusting monitor settings
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- Power management
- Maintaining
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Connecting your monitor

To set up your monitor, first unpack the box, unwrap the components, attach the base, then make your cable connections.

Attaching the base

▶ To attach the base:

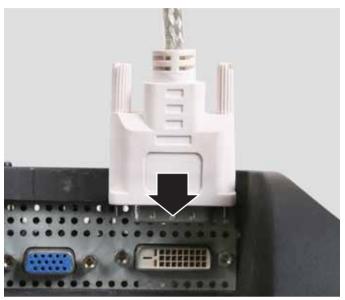
Place the monitor base on a table top, then slide the monitor neck down onto the base until
it clicks into place. You may need to press the button on the base to let the monitor slide
on smoothly.



Connecting video inputs

▶ To connect video sources to your monitor:

- 1 Position your computer and your monitor so you can reach the back of each.
- 2 If your computer has a digital video connector (DVI), connect a DVI video cable (not included) to the white connector on the display.



- OR -

Connect the blue VGA video cable to the blue connector on the display.

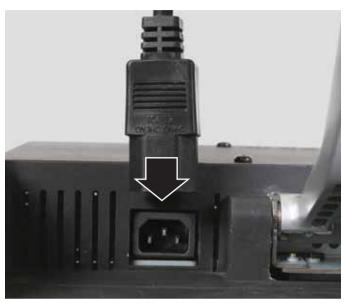


3 Make sure that your computer is turned off, then connect the other end of the video cable to the matching video port on the back of your computer.

Connecting power

▶ To connect power:

1 Position your monitor so you can reach the back, then connect the power cord to the power connector under the back of your monitor.



2 Plug the power cord into a correctly grounded power outlet. We recommend using a surge protector to protect your monitor from voltage spikes.

Connecting a security cable

You can secure your monitor to your computer desk (or to another heavy object) with a cable lock. To connect a cable lock, follow the cable lock's instructions to connect it to the Kensington lock slot on the back of your monitor (cable lock not included).



Starting your monitor

▶ To start your monitor:

1 Press the () (power) button on the side of your monitor. The power LED in front of the power button turns on.



- 2 Turn on your computer. After your computer is running, the power LED on your monitor's power button should be blue. Allow about 10 seconds for the display image to appear. If the power LED is not blue or you do not see a display image, check the connections. For more troubleshooting information, see "Troubleshooting" on page 11.
- 3 Adjust the tilt of your monitor for the best viewing angle.
- 4 Use the on-screen display (OSD) to adjust other monitor settings. For more information, see "Adjusting monitor settings" on page 6.

Adjusting monitor settings

Use your monitor controls (located on your monitor itself) and computer controls (accessible through Windows) to adjust the display image. For more information about computer controls, see "Changing Windows screen settings" on page 10.

Using the monitor buttons

This monitor features an on-screen display (OSD) that lets you adjust contrast, brightness, and other settings for your monitor. Your monitor saves changes you make to the settings, even if you turn off your monitor.



Input

OSD active: Press to move to the previous menu. OSD inactive: Press to select the video source.

Auto

OSD active: Press to open a menu or setting.

OSD inactive: Press to automatically optimize the monitor's image position, clock, and phase.

X / △ (brightness)

OSD active: Press to move up through menus and adjust OSD options.

OSD inactive: Press to adjust the brightness.

●/∇ (contrast)

OSD active: Press to move down through menus and adjust OSD options.

OSD inactive: Press to adjust the contrast.

Menu

Press to open or close the OSD.

On-screen display options

Adjusting OSD settings

▶ To adjust the OSD settings:

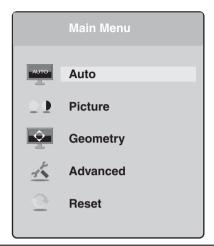
While the OSD is active, on-screen labels appear next to the buttons to help you identify them.

- 1 Press the **Auto** button. The display image is automatically adjusted to the ideal settings for your current screen resolution.
- 2 Press the Menu button. The OSD opens.
- Press the $\mbox{\$}/\Delta$ (brightness) or $\mbox{$\mathbb{O}/\nabla$}$ (contrast) button to highlight a setting, then press the **Auto** button to open the selected menu or setting.
- 5 Press the **Input** button to return to a previous menu.
- 6 When you have finished making all adjustments, press the Menu button at the Main Menu to exit.

OSD menus

OSD Menu

Main menu



Description

Auto—Automatically adjusts your monitor to its optimum

settings.

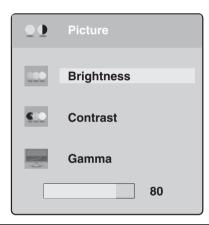
Picture—Opens the Picture menu, where you can adjust brightness, contrast, gamma, and video scaling.

Geometry—Opens the Geometry menu, where you can adjust image size and minimize distortions.

Advanced—Opens the Advanced menu, where you can adjust the color balance, change the OSD language, and display information about current monitor settings.

Peset—Pesets the monitor to its factory settings. Reset—Resets the monitor to its factory settings.

Picture menu



Brightness—Adjusts the amount of light in the darkest portion of the picture. Use the lowest brightness setting you are comfortable with to maximize the life of the monitor backlights.

You may need to readjust brightness after the monitor warms up.

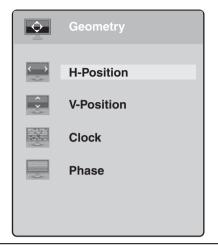
Contrast—Adjusts the level of white between the lightest

and darkest portions of an image.

Gamma—Customizes the gamma level. High gamma levels increase white levels and low gamma levels increase contrast.

OSD Menu

Geometry menu



Description

H-Position—Moves the display image left and right. You can also press the **Auto** button to configure the horizontal

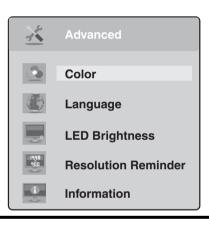
position automatically.

V-Position—Moves the display image up and down. You can also press the **Auto** button to configure the vertical position automatically.

Clock—Minimizes any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.

Phase—Minimizes any horizontal distortion and clears or sharpens the displayed characters.

Advanced menu



Color—Customizes the color levels.

Language—Changes the language of the OSD.

LED Brightness—Changes the brightness of the Standby and Power LED to Day Mode or Nite Mode.

Resolution Reminder—If the computer display input is not set to 1440 × 900, displays a reminder that you should change your computer's settings to use the optimum 1440 × 900 resolution. If you prefer using your monitor at a resolution less than that use this option to

monitor at a resolution less than that, use this option to turn off the Resolution Reminder. For information on changing your computer's display resolution, see "Changing Windows screen settings" on page 10.

Information—Displays the current screen resolution.

Changing Windows screen settings

Adjusting the color depth and screen area are two of the most basic display settings you may need to change. You can also adjust settings such as the screen background and screen saver.

Changing color depth and screen resolution

Color depth is the number of colors your computer uses to display images on your monitor. Most images look best displayed with the maximum number of colors available. If the color in your images seems "false" or "jumpy," especially after you have played a game or run a video-intensive program, check the color depth setting and return it to the highest color setting, if necessary. Screen resolution is the number of pixels (individual colored dots) your computer uses to display images on your monitor. The higher the resolution, the more information and screen components

7 Help

For more information about adjusting the screen, click **Start**, then click **Help and Support**. Type **adjusting monitor settings** in the **Search Help** box, then press **ENTER**

(such as icons and menu bars) can be displayed on your monitor.

- ▶ To change the color depth or screen resolution in Windows Vista:
 - 1 Click (Start), Control Panel, then under Appearance and Personalization, click Adjust Screen Resolution. The *Display Settings* dialog box opens.
 - 2 To change the color depth, click the Colors list, then click the color depth you want.
 - Low (8-bit) = 256 colors
 - **Medium (16-bit)** = 65,500 colors
 - **Highest (24-bit)** = 16,700,000 colors
 - 3 To change the screen resolution, drag the **Resolution** slider to the size you prefer.
 - 4 Click Apply. If the new settings do not look right, click No. If the new settings make the screen illegible and you cannot click No, the settings return to their previous values after several seconds.
 - 5 Click **OK**, then click **Yes** to save your changes.
- To change the color depth or screen resolution in Windows XP:
 - 1 Right-click any empty space on the desktop, then click Properties. The Display Properties dialog box opens.
 - 2 Click the Settings tab.
 - To change the color depth, click the arrow button to open the Color quality list, then click the color depth you want.
 - Low (8-bit) = 256 colors
 - Medium (16-bit) = 65,500 colors
 - **Highest (24-bit)** = 16,700,000 colors
 - 4 To change the screen resolution, drag the **Resolution** slider to the size you prefer.
 - 5 Click **OK**, then click **Yes**.

Power management

Energy declaration

When connected to a computer that supports the VESA Display Power Management Signaling (DPMS) Protocol, your monitor can conserve significant energy by reducing power consumption during periods of non-use. When your computer goes into the energy saving mode, your monitor will then enter the Active Off mode (sleep). In the Active Off mode the Power LED will still show orange.

Use these conventions and the power can be reduced to the following levels:

VESA State	LED Indicator	Power Consumption
On	Blue	<38 W
Standby	Orange	<2 W
Off	Off	<1 W

To "wake" your monitor when it is in Standby/Active Off mode, move the mouse or press any keyboard key.

You can change your monitor's power management settings using the Windows Control Panel. For more information, see your computer's *User Guide*.

Maintaining

To keep your monitor in optimal working order:

- Do not block the ventilation holes.
- Do not expose your monitor to rain or use near water.
- · Keep your monitor away from radiators or heat vents.
- Keep your monitor out of direct sunlight.



 To clean your monitor, use a soft cloth slightly moistened with water only. Wipe the cabinet, screen, and controls.

Troubleshooting



If you have problems with your monitor, the information in this troubleshooting section may help you solve them.

No power

Make sure that the power cord is connected correctly to both the back of your monitor and the power outlet. For more information about connecting the power cord, see "Connecting your monitor" on page 2.

No picture

- Make sure that the power cord is connected correctly to both the back of your monitor and the power outlet. For more information about connecting the power cord, see "Connecting power" on page 4.
- Make sure that the video cable is connected securely to both the back of your monitor and your computer. For more information about connecting the video cable, see "Connecting video inputs" on page 3.
- Make sure that your monitor is turned on.
- If you have the monitor connected to your notebook's video port, you have two options:
 - If your notebook supports dual displays, you can use both your notebook's display and this monitor in extended desktop multi-monitor mode. See Windows Help to learn how to enable multiple monitors.
 - You can also use this monitor as your primary monitor and not use the notebook's screen. Notebook computers typically have an **FN** key combination that lets you toggle between your notebook's display, an externally attached display, and both at the same time. See your notebook's user guide for more information.
- If the power LED is orange:
 - Make sure that your computer is turned on.
 - Move the mouse or press any key on the keyboard to bring your monitor out of sleep mode.
 - Restart your computer with your monitor turned on.
 - Make sure that the video cable is not damaged.
 - Check the end of the video cable for any pins that might be bent or pushed in.
- Turn off your monitor and unplug the video cable from the back of your computer. Turn your monitor back on and wait for ten seconds. If your monitor is functioning correctly, a "No Signal" message appears. For more information about connecting the video cable, see "Connecting video inputs" on page 3.

Display colors are wrong

- Press the Menu button, then press the Auto button to automatically adjust the display image to the ideal settings.
- Restart your computer with your monitor turned on.
- Make sure that the video cable is connected securely to the back of your monitor and your computer. For more information about connecting the video cable, see "Connecting video inputs" on page 3.
- Make sure that the video cable is not damaged.
- · Check the end of the video cable for any pins that might be bent or pushed in.

Picture has shadows or "ghosts"

- Press the Menu button, then press the Auto button to automatically adjust the display image to the ideal settings.
- Remove any extension cables or switchboxes.
- Make sure that the video cable is connected securely to both the back of your monitor and your computer. For more information about connecting the video cable, see "Connecting video inputs" on page 3.
- Make sure that the video cable is not damaged.
- Check the end of the video cable for any pins that might be bent or pushed in.
- If you are using a VGA connection, make sure that you use the VGA cable that came with your monitor.

Color is not uniform

- Press the Menu button, then press the Auto button to automatically adjust the display image to the ideal settings.
- Make sure that your monitor warms up for at least 30 minutes before making a final judgment about color uniformity or brightness.

Image is not sized or centered correctly

- Press the Menu button, then press the Auto button to automatically adjust the display image to the ideal settings.
- Use the position controls to adjust the image. For instructions on how to adjust the display image position, see "Adjusting monitor settings" on page 6.
- If the image looks stretched or fuzzy, you must adjust the operating system's display settings to match the monitor's optimal (native) 1440 × 900 setting. For information on adjusting settings, see "Changing Windows screen settings" on page 10.
- If you are trying to select 1440 × 900 but it is not available in the Windows display control panel:
 - Make sure that your video card can display at 1440 × 900 resolution.
 - This may be caused by older video drivers on your computer. See the Gateway support
 Web site (www.gateway.com) for updated video drivers for your computer. You can also
 go directly to your video card's support Web site for the most up-to-date video drivers.
 The Web sites for the major video card manufacturers are:

ATI[®]: <u>www.amd.com</u> Intel[®]: <u>www.intel.com</u> Nvidia[®]: <u>www.nvidia.com</u>

- If your games do not have support for widescreen displays:
 - Newer games are adding support for widescreen displays as the widescreen format becomes more popular. Check the game's Web site for updates. You can also consult the following Web site for specific settings and options to configure older games to support widescreen: www.widescreengamingforum.com.

Some adjustments may require you to make changes to the Windows System Registry. We recommend making a complete system backup before changing the System Registry.

Your monitor has pixels that are always dark or too bright

This condition is normal and inherent in the TFT technology used in active-matrix LCD screens. Gateway's inspection standards keep these to a minimum. If you feel these pixels are unacceptably numerous or dense on your display, contact Gateway Customer Care to identify whether a repair or replacement is justified based on the number of pixels affected.

Connecting a game console

If you want to connect your game console to this monitor, use optional video cables (available
at <u>www.gateway.com</u> if ordering from the United States). To determine the type of cable
you need, see your gaming console's documentation.

Specifications

Specifications are subject to change without notice or obligation. Many products for Gateway and its subsidiaries are custom engineered by our suppliers to Gateway specifications and may vary from similarly marketed products.

Panel size	19 inches (diagonal)	
Panel type	19-inch viewable TFT with glare coating	
Pixel resolution	1440 × 900 (native)	
Pixel pitch	0.0112 × 0.0112 inches (0.2835 mm × 0.2835 mm)	
Aspect ratio	16:10	
Brightness	300 cd/m ²	
Contrast ratio	1000:1	
Viewing angles	160° horizontal 160° vertical	
Response time	5 ms	
Lamp type/life	50,000 hours	
Colors	16.7 million	
OSD languages	English, French, Spanish, Italian, Japanese	
Connections and inputs	Analog (VGA): 15-pin mini d-sub VGA Digital (DVI-D): 24-pin DVD-D with HDCP AC power	
Cables	15-pin mini d-sub analog VGA (included) 24-pin DVI-D (not included)	
Power consumption	Normal operation: <38 W Standby (power-save): <2 W Off: <1 W	
Power input	100-240 VAC, 50/60 Hz	
Power management	Energy Star®	
Certifications	UL, cUL, FCC Class B, NOM, and CE. VCCI where applicable.	
Wall mount bracket	ket VESA 4×3.937 inches $(4 \times 100 \text{ mm})$	
Dimensions	17.52 \times 15.36 \times 7.04 inches (44.50 \times 39.01 \times 17.88 cm) with basic stand	

Video modes

Mode	Mode name and resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)
1	VGA 640 × 350	31.469	70.087
2	VGA 640 × 480	31.469	59.941
3	VESA 640 × 480	37.861	72.810
4	VESA 640 × 480	37.500	75.000
5	VGA 720 × 400	31.469	70.087
6	VESA 800 × 600	35.156	56.250
7	VESA 800 × 600	37.879	60.317
8	VESA 800 × 600	48.077	72.188
9	VESA 800 × 600	46.875	75.000
10	VESA 1024 × 768	48.363	60.004
11	VESA 1024 × 768	56.476	70.069
12	VESA 1024 × 768	60.023	75.029
13	VESA 1280 × 1024	63.980	60.020
14	VESA 1280 × 1024	79.976	75.025
15	VESA 1440 × 900	55.935	59.887
16	VESA 1440 × 900	70.635	74.984

Safety, Regulatory, and Legal Information

- Important safety information
- · Environmental information
- Regulatory compliance statements
- Notices

Important safety information



Warning

Always follow these instructions to help guard against personal injury and damage to your Gateway product

Warning

Do not use Gateway products in areas classified as hazardous locations. Such areas include patient care areas of medical and dental facilities, oxygen-laden environments, or industrial facilities.

Your Gateway product is designed and tested to meet the latest standards for safety of information technology equipment. However, to ensure safe use of this product, it is important that the safety instructions marked on the product and in the documentation are followed.

Setting up your system

- Read and follow all instructions marked on the product and in the documentation before you operate your system. Retain all safety and operating instructions for future use.
- Do not use this product near water or a heat source such as a radiator.
- Set up the system on a stable work surface.
- The product should only be operated from the type of power source indicated on the rating label.
- If your product has a voltage selector switch, make sure that the switch is in the proper position for your area. The voltage selector switch is set at the factory to the correct voltage.
- Openings in the monitor case are provided for ventilation. Do not block or cover these openings. Make sure you provide adequate space, at least 6 inches (15 cm), around the system for ventilation when you set up your work area. Never insert objects of any kind into the monitor ventilation openings
- Some products are equipped with a three-wire power cord to make sure that the product is properly grounded when in use. The plug on this cord will only fit into a grounding-type outlet. This is a safety feature. If you are unable to insert the plug into an outlet, contact an electrician to install the appropriate outlet.
- If you use an extension cord with this system, make sure that the total ampere rating on the products plugged into the extension cord does not exceed the extension cord ampere rating.

Care during use



Warning To prevent electric shock, never remove the cover. No user serviceable parts inside. Refer servicing to qualified service personnel

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill anything on the system. The best way to avoid spills is to avoid eating and drinking near your system.
- Do not expose the monitor to rain or use near water. If the monitor does get exposed to moisture, unplug it and allow it to dry for 24 hours. Call Gateway Customer Care for advice on whether the monitor is safe to turn back on.
- When the monitor is turned off, a small amount of electrical current still flows through the monitor. To avoid electrical shock, always unplug all power cables and modem cables from the wall outlets before cleaning the system.
- Unplug the system from the wall outlet and refer servicing to qualified personnel if:
 - The power cord or plug is damaged.
 - Liquid has been spilled into the system.
 - The system does not operate properly when the operating instructions are followed.
 - The system was dropped or the cabinet is damaged.
 - The system performance changes.

Replacement parts and accessories

Use only replacement parts and accessories recommended by Gateway.

Environmental information

EPA ENERGY STAR®



As an ENERGY STAR Partner, Gateway has determined that this product meets or exceeds the ENERGY STAR 4.1 performance guidelines for computer energy efficiency and power management.

ENERGY STAR Power Management (standard in the Windows operating system) places inactive components (CPU, hard drives, and other components except memory) into a low-power Sleep mode. Sleep mode uses less energy to run your computer, saves on your energy costs, and helps protect the environment by reducing greenhouse gas emissions.

Your computer was shipped with Sleep mode enabled. While your computer is in Sleep mode, the power indicator flashes. To use your computer after it has entered Sleep mode, move the mouse, press a key on the keyboard, or press the power button to "wake" it up.

For more information about the power management features of your Gateway desktop computer, see "Changing power-saving settings" in the online *User Guide*.

For more information about the power management features of your Gateway notebook, see "Managing Power" in the online Reference Guide.



For more information about Sleep mode in Windows Vista, click **Start**, then click **Help and Support**. Type **sleep** in the **Search Help** box, then press **ENTER**.

Recycling





THE LAMP IN THIS DISPLAY CONTAINS MERCURY. DISPOSE ACCORDING TO LOCAL, STATE, AND FEDERAL LAW.

The product you have purchased contains extracted natural resources that have been used in the manufacturing process. This product may contain substances known to be hazardous to the environment or to human health.

To prevent releases of harmful substances into the environment and to maximize the use of our natural resources, Gateway provides the following information on how you can responsibly recycle or reuse most of the materials in your "end of life" product.

Waste Electrical and Electronic Equipment (commonly known as WEEE) should never be disposed of in the municipal waste stream (residential garbage collection). The "Crossed-Out Waste Bin" label affixed to this product is your reminder to dispose of your "end of life" product properly.



Substances such as glass, plastics, and certain chemical compounds are highly recoverable, recyclable, and reusable. You can do your part for the environment by following these simple steps:

- When your electrical or electronic equipment is no longer useful to you, "take it back" to your local or regional waste collection administration for recycling.
- In some cases, your "end of life" product may be "traded in" for credit towards the purchase of new Gateway equipment. Call Gateway to see if this program is available in your area.
- If you need further assistance in recycling, reusing, or trading in your "end of life" product, you may contact us at the Customer Care number listed in your product's user guide and we will be glad to help you with your effort.

Finally, we suggest that you practice other environmentally friendly actions by understanding and using the energy-saving features of this product (where applicable), recycling the inner and outer packaging (including shipping containers) this product was delivered in, and by disposing of or recycling used batteries properly.

With your help, we can reduce the amount of natural resources needed to produce electrical and electronic equipment, minimize the use of landfills for the disposal of "end of life" products, and generally improve our quality of life by ensuring that potentially hazardous substances are not released into the environment and are disposed of properly.

For additional recycling information specific to your area, please go to www.gateway.com/recycle.html.

Regulatory compliance statements

United States of America

Federal Communications Commission (FCC) Unintentional emitter per FCC Part 15

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on a different circuit from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

Compliance Accessories: The accessories associated with this equipment are: shielded video cable. These accessories are required to be used in order to ensure compliance with FCC rules.

FCC declaration of conformity

Model: HD1900



Caution

Changes or modifications not expressly approved by Gateway could void the FCC compliance and negate your authority to operate the product.

California Proposition 65 Warning

This product contains chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm. For additional information regarding this product warning, go to www.gateway.com/prop65

Responsible party:

Gateway, Inc. 7565 Irvine Center Drive Irvine, CA 92618 USA

This device complies with Part 15 of the FCC Rules. Operation of this device is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Canada

Industry Canada (IC) Unintentional emitter per ICES-003

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par Industrie Canada.

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